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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
10/816,274	04/01/2004	Eitaro Morita	8305-244US (NP151-1)	8814		
-,-	7590 04/03/200 STRAUSS HAUER &	··-	EXAMINER			
ONE COMMERCE SQUARE 2005 MARKET STREET, SUITE 2200			MCAVOY, ELLEN M			
PHILADELPH	•	<del>0</del> 0	ART UNIT	PAPER NUMBER		
	,	1764				
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE			
3 MO	NTHS	04/03/2007	PAPER			

## Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

			1
	Application No.	Applicant(s)	
	10/816,274	MORITA, EITARO	
Office Action Summary	Examiner	Art Unit	-
	Ellen M. McAvoy	1764	
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet wi	th the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DATE - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period versilize to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNIC 36(a). In no event, however, may a re vill apply and will expire SIX (6) MON, , cause the application to become AB	CATION.  Sply be timely filed  ITHS from the mailing date of this communication  ANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on			
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.		
3) Since this application is in condition for allowar			is
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims			
4) Claim(s) <u>1-5</u> is/are pending in the application.			
4a) Of the above claim(s) is/are withdraw	wn from consideration.		
5) Claim(s) is/are allowed.	•		
-6)⊠ Claim(s) <u>1-5</u> is/are rejected.			
7) Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction and/o	r election requirement.		
Application Papers			
9) The specification is objected to by the Examine	r.		
10) The drawing(s) filed on is/are: a) acc	epted or b)☐ objected to l	by the Examiner.	
Applicant may not request that any objection to the	drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the correct	· -	•	(d).
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached	Office Action or form PTO-152.	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. §	119(a)-(d) or (f).	•
a)⊠ All b)☐ Some * c)☐ None of:			
<ol> <li>Certified copies of the priority document</li> </ol>	s have been received.		
2. Certified copies of the priority document	s have been received in A	pplication No	
3. Copies of the certified copies of the prior	<del>-</del>	received in this National Stage	
application from the International Bureau	, , , ,		
* See the attached detailed Office action for a list	of the certified copies not	received.	
	•		
Attachment(s)			
1) Notice of References Cited (PTO-892)		ummary (PTO-413)	
<ul> <li>2) Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3) Information Disclosure Statement(s) (PTO/SB/08)</li> </ul>		)/Mail Date Iformal Patent Application	

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Paper No(s)/Mail Date 01 April 2004.

6) Other: \_\_\_\_\_.



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## Claim Rejections - 35 USC § 112

Claims 1-5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is not clear what is meant by "an SP type extreme pressure additive" in claim 1. It is apparent from the specification that "SP" refers to sulfur-phosphorus which should be included in the independent claim.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sato et al (6,617,286), Ogano et al (6,638,897) and Bovington et al (6,720,293), considered separately.

Sato et al ["Sato"] disclose a lubricating oil composition for continuously variable transmissions which comprises a lubricating base oil made of mineral oil and/or a synthetic oil formulated with a phosphorus-based wear preventive additive (A), a metal detergent additive (B) and an ashless dispersant additive (C). Sato teaches that the base oil component has a kinematic viscosity ranging from 0.5 to 200 mm²/s at 100°C, preferably 2-25 mm²/s at 100°C, and that mixtures of mineral oils and synthetic oils may be used in combination. See column 3, line 43 to

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column 4, line 43. The phosphorus-containing wear preventive used as component (A) includes phosphate esters and phosphite esters which may contain sulfur atoms. Sato teaches that the amount of the additive is within the range of 200-500 ppm as phosphorus (P) based on the total weight of the composition. See column 4, lines 48-63. The metal detergent additive (B) includes overbased calcium salicylates having a TBN ranging from 10-450 mg KOH/g. Sato teaches that the amount of metal detergent is preferably in the range of 100-1000 ppm as a metal content based on the total weight of the composition. The ashless dispersant additive (C) includes boron-containing succinimides. See column 5. Sato allows for the addition of other additive to the composition including non-borated imide ashless dispersants. See column 6. Thus, the examiner is of the position that the compositions of Sato clearly meet the limitations of the above rejected claims.

Ogano et al ["Ogano"] disclose a lubriating oil composition for internal combustion engines comprising a base oil composed of a mineral oil, synthetic oil, or mixtures thereof, incorporated with (A) an overbased calcium salicylate having a TBN in the range of 30-100 mgKOH/g in an amount of 0.05 to 0.90 weight % as calcium, and (B) a succinimide selected from the group consisting of (1) a boron-containing succinimide having a weight-average molecular weight of 3,000 or less at 0.04 weight % or less as boron, and (2) a non-borated succinimide having a weight average molecular weight of 3,000 or less at 0.01 to 0.25 weight % as nitrogen, and (3) mixtures thereof. See column 3, lines 7-53. Ogano teaches that the base oil may be used either individually or in combination and the oil(s) have a kinematic viscosity in the range of 2 to 20 mm²/s at 100°C. Ogano allows for the addition of other additives to the

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compositions that include phosphoric acid esters and phosphorous acid esters as antiwear agents which may be used in amounts of 0.1 to 5 % by weight. See column 7. Thus the examiner is of the position that all of the components of applicant's claims are taught by Organo.

Bovington et al ["Bovington"] disclose a low viscosity lubricating oil composition having no more than 0.16 mass % of phosphorus, preferably less than 0.09 mass % phosphorus, which comprises a lubricating oil basestock and, as additives, (a) from 1-10 mass % of a dispersant including both borated and non-borated succinimides, (b) 0.05 to 0.6 mass % of elemental calcium derived from one or more detergents, and optional additives including zinc dihydrocarbyl dithiophosphate, an antioxidant, a pour point depressant, and a viscosity modifier. See column 1. Bovington teaches that usually the dispersants contain from about 0.01 to 0.1 mass % boron, as elemental boron. See column 5. Bovington teaches that the detergent component can have a TBN in the range of 15 to 600, and that suitable detergents include calcium salicylates. See column 6. The examiner is of the position that the compositions of Bovington meet the limitations of the above rejected claims.

## **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ellen M. McAvoy whose telephone number is (571) 272-1451. The examiner can normally be reached on M-F (7:30-5:00) with alt. Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ilen M McAvoy

Primary Examiner

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EMcAvoy March 25, 2007